

IN THE CLAIMS

Kindly rewrite claim 1 as follows:

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1. (Twice Amended) An orthopaedic spatial fixation system for holding bone parts comprising a plurality of fixation plates wherein each plate includes a body portion having n attachment structures positioned therein, whereby said attachment structures are substantially positioned along an arc of α° of a circle defined by a diameter d, and the [cord] chord length between adjacent attachment structures is substantially equal to [1] l, and

$$d = l \left(\sqrt{\frac{1}{\tan^2 \left(\frac{\alpha}{2n} \right)} + 1} \right)$$

and whereby the diameter d for each plate within the system is unique, and the value for $n(360 \alpha)$ for each consecutive plate diameter d in the system is a multiple of 3.

Kindly add the following new claims:

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--15. An orthopaedic spatial fixation system, comprising a plurality of fixation plates wherein each plate comprises at least six points, such that a first fixation plate can be rotated less than approximately 120° about a central axis and the points of the first fixation plate will maintain a defined relationship with respect to the points of another fixation plate in the system, facilitating the application of mathematical methods during use of the fixation system.

16. The orthopaedic spatial fixation system of claim 15, wherein the first fixation plate can be rotated approximately 60° about the central axis and maintain substantially identical angular relation with some points of another fixation plate in the system.

17. The orthopaedic spatial fixation system of claim 15, comprising a plurality of points in a number that is a multiple of six, providing 2x3 symmetry such that the first fixation plate can be flipped or rotated or both and maintain the defined relationship with respect to points of another fixation plate in the system.

18. The orthopaedic spatial fixation system of claim 15, wherein the plurality of fixation plates are circular.

19. The orthopaedic spatial fixation system of claim 15, wherein the plurality of fixation plates are not circular.

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20. The orthopaedic spatial fixation system of claim 15, wherein the points on the plurality of fixation plates are positioned so that in use, points on opposite plates move into alignment as adjustment is effected.

21. The orthopaedic spatial fixation system of claim 15, wherein the points are attachment structures.

22. The orthopaedic spatial fixation system of claim 15, wherein the points are positioned along an arc of α° of at least a partial circle defined by a diameter d , and the chord length between adjacent attachment structures is substantially equal to l , and the defined relationship comprises

$$d \sim l \left(\sqrt{\frac{1}{\tan^2 \left(\frac{\alpha}{2n} \right)} + 1} \right)$$

23. The orthopaedic spatial fixation system of claim 15, wherein the orthopaedic spatial fixation system is positioned on a patient.

24. The orthopaedic spatial fixation system of claim 15, further comprising six struts, each connected at one end to one of three of the points of the first fixation plate and connected at the other end to one of three of the points of a second fixation plate, wherein each point is connected to two struts.

25. The orthopaedic spatial fixation system of claim 15, further comprising six struts, each connected at one end to one of six of the points, wherein each of the six points is substantially equidistant from one of three additional points.

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26. The orthopaedic spatial fixation system of claim 25, wherein each strut is connected at one end to one of six of the points of the first fixation plate and connected at another end to one of six of the points of a second fixation plate, and wherein one end of a first strut is separated from another end of another strut by one of the three additional points.

27. The orthopaedic spatial fixation system of claim 15, wherein the at least six points are provided in number that is a multiple of three.

28. The orthopaedic spatial fixation system of claim 15, further comprising six struts, each strut having a first end and a second end, wherein the first end of each of the six struts is connected to one of three of the points of the first fixation plate such that two struts share a single point, and wherein the second end of each strut is connected to one of six of the points on the another fixation plate such that no second end of the six struts shares a single point.

29. An orthopaedic spatial fixation system, comprising:

(a) at least two fixation plates wherein each plate comprises a body portion having a plurality of points in multiples of three but in a number greater than three, whereby the points are placed substantially equidistant from one another along the at least two fixation plates, such that a first fixation plate can be rotated less than approximately 120° with respect to a second fixation plate, while maintaining a defined relation between the points of the at least two fixation plates; and

(b) a plurality of adjustable length struts adapted to interconnect the plates at various positions, wherein the points facilitate attachment of the struts.

30. The orthopaedic spatial fixation system of claim 29, further comprising an accessory adapted to be attached to either or both of the at least two fixation plates.

31. The orthopaedic spatial fixation system of claim 29, wherein the orthopaedic spatial fixation system is positioned on a patient.

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32. The orthopaedic spatial fixation system of claim 29, further comprising six struts, each connected at one end to one of three of the points of the first fixation plate and connected at the other end to one of three of the points of a second fixation plate, wherein each point is connected to two struts.

33. The orthopaedic spatial fixation system of claim 29, further comprising six struts, each connected at one end to one of six of the points, wherein each of the six points is substantially equidistant from one of three additional points.

34. The orthopaedic spatial fixation system of claim 33, wherein each strut is connected at one end to one of six of the points of the first fixation plate and connected at another end to one of six of the points of a second fixation plate, and wherein one end of a first strut is separated from another end of another strut by one of the three additional points.

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35. An orthopaedic spatial fixation system, comprising at least two fixation plates wherein each plate comprises a body portion having a plurality of points in multiples of three but in a number greater than three, whereby the points are placed substantially equidistant from one another along the at least two fixation plates, such that a first fixation plate can be rotated less than approximately 120° with respect to a second fixation plate, while maintaining a defined relation between the points of the at least two fixation plates.--